CSS.402.6 Build confidence in the use of non-targeted analysis for exposure assessment through applications

Building confidence in the use of new approach methods (NAMs) for exposure assessment is necessary before such methods can be adopted for use in chemical safety decision making. Applications of new approach methods, including in regulatory-relevant contexts, can build confidence in their ability to provide sound data to inform exposure assessment.

The application of non-targeted analysis (NTA) methods will be covered in this Output, including but not limited to, measurement of chemicals in various media using NTA, including for contaminant identification of CIECs, the use of NTA methods to inform climate change research, specifically identification of chemicals in environmental media after catastrophic events such as wildfires or flooding, and advancing the understanding of the exposome to inform cumulative impacts research.

Solutions focused Applications

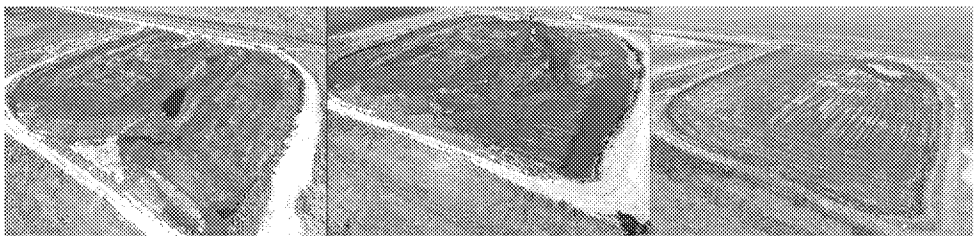
"let's see what's there" type projects Vs. "we know something's there and we need help figuring out what it is."	We have plenty and will continue to do this This is what we're trying to focus on

Topics we'd like to explore

- Rapid/emergency response (especially problems exacerbated by climate change like wildfires and flooding)
  - Overlap with ACE project looking at products of incomplete combustion when structures burn
  - Transformation products of Clean Water Act chemicals currently being stored in above ground storage tanks
- Metabolites/transformation products
- Effects directed analysis
- Multiomics
- Applications of tools, guidance, workflows, etc. from CSS 402.5
  - Improved identifications
  - qNTA
  - Benchmarking
- UVCBs??? Leftover work from STRAP3

Project: AltEn

- Closed ethanol facility in Nebraska
- High levels of neonicotinoids contaminated surrounding areas
- Noxious odor
- Potential for EDA, transformation product identification, multiomics (Biales)
- Working with state of Nebraska, Region 7, and University of Nebraska



Project: WESS

- The Water Equity Science Shop (WESS) is a collaboration between Universities of California Berkeley (UCB) and Los Angeles (UCLA), Silent Spring Institute (SSI) and the CA Office of Environmental Health Hazard Assessment (OEHHA)
- NIEHS grant – not decided yet
- Focusing on water quality differences between regions in California, particularly low-income communities
- This is an EJ drinking water project that will use Brita filters for sampling

How to submit a product:

- Not limited to what we've talked about today
- Work with output lead, RAC Team, and your supervisors
- Deadline: February 12, 2022
- Submit via RAPID